# A Collective-Deliberation-Driven Report on *Epistemic Boundaries*

1. What is epistemic trespassing?

**Epistemic trespassing**, a concept that navigates the intricate balance between disciplinary integrity and the valor of interdisciplinary inquiry, invites a comprehensive examination of the roles and limitations imposed by **epistemic boundaries**. This exploration is crucial, especially when considering the potential harms arising from uninformed cross-disciplinary ventures, a concern significantly magnified in contexts such as the global pandemic. The term itself, fraught with negative connotations, prompts a critical reassessment of how it may inadvertently stifle rather than encourage the fruitful exchange of cross-disciplinary insights and collaboration.

The nuanced distinction between **normative and positive forms of epistemic trespassing** becomes paramount in safeguarding the value of constructive interdisciplinary endeavors. Such differentiation not only protects the integrity of discourse but also ensures vigilance against ventures that risk misleading public discourse or causing harm. This dichotomy further underscores the imperative of **scientific humility** within academic discourse. The prevailing **incentive structures**, which favor visibility over accuracy, necessitate a cultural shift towards a model that champions nuanced, precise communication, thereby enhancing the reliability and integrity of scientific contributions.

Central to this discourse is the concept of **cognitive authority and the construction of expertise**. Traditional views on objective expertise are increasingly challenged by a constructivist approach, recognizing the complex, social, and interdisciplinary nature of how

expertise is ascribed. This shift from objective to constructivist understandings of expertise invites a deeper contemplation of the **contested nature of epistemic boundaries and authority**, probing who possesses the power to define what constitutes as epistemic trespassing within the realms of knowledge.

The **reevaluation of epistemic norms**, inspired by the practices of superforecasters, exemplifies the potential benefits of norms that are empirically linked to good judgment and embrace a broader, more inclusive understanding of expertise. Furthermore, the discourse examines the **legitimacy and value of contributions made outside formal expertise**, emphasizing the importance of context, accuracy, and confidence calibration in assessing the value of interdisciplinary contributions.

An emerging consideration is the **role of artificial intelligence in epistemic trespassing**, expanding the dialogue to include the potential for digital entities to cross disciplinary boundaries. This extension of the debate highlights the evolving nature of interdisciplinary exploration and its implications for future discourse.

Lastly, the quest for **alternative terminologies** to "epistemic trespassing" reflected a collective desire of part of the community to mitigate the term's negative implications. "Epistemic venturing" emerges as a potential concept that encapsulates the spirit of interdisciplinary exploration without the pejorative undertones, promoting a more inclusive and constructive approach to navigating the complex landscape of knowledge and expertise. This term, and others like it, represent a pivotal step towards reimagining the boundaries of disciplines, encouraging a culture of collaboration, openness, and mutual respect among diverse fields of study.

## 2. Bridging Disciplines: The Dynamics of Interdisciplinary Knowledge Exchange

The exploration of **epistemic trespassing** within the scientific community has unveiled the nuanced interplay between different domains of expertise and the pivotal role of interdisciplinary communication. This discourse reveals the intricate balance required to facilitate collaboration across diverse fields of study, emphasizing the need for a comprehensive understanding of both **interactional** and **contributory expertise**. Interactional expertise is characterized by the knowledge of the practice language for a discipline and confers ability to meaningfully understand and contribute to judgements made within that field, whereas contributory expertise refers to the specific abilities and qualifications required for professional practice within the discipline. This distinction underlines the importance of recognizing and valuing the unique contributions of individuals within interdisciplinary teams, where members hold contributory expertise in their own discipline but would likely need to acquire interactional expertise in more than one discipline to foster a more cohesive and effective exchange of ideas and findings.

At the core of this interdisciplinary engagement is the **Role of Epistemic Humility**. Epistemic humility, the acknowledgment of the limits of one's knowledge and the openness to other disciplinary perspectives, is crucial for navigating the complex terrain of interdisciplinary research. It serves as a mitigative force against the overestimation of one's expertise, encouraging a more inclusive and collaborative approach to scientific inquiry. This humility is not just a personal virtue but a foundational principle that guides the effective collaboration and knowledge exchange across disciplinary boundaries, promoting a culture of learning and mutual respect.

The conversation further delves into strategies for **Improving Knowledge Brokerage**, highlighting the essential role of knowledge brokers in facilitating interdisciplinary communication. Knowledge brokers act as intermediaries who bridge the gap between different scientific communities, enhancing the flow of information and insights. By understanding and appreciating the role of these brokers, the scientific community can leverage their skills to improve the dissemination and integration of knowledge across various fields, thereby enriching the interdisciplinary dialogue.

**Collective Behavior and Epistemic Trespassing** introduces a critical examination of whether group dynamics are a prerequisite for navigating outside one's expertise domain. This discussion underscores the significance of social dynamics in the dissemination and, occasionally, the misunderstanding of knowledge. It brings to light the complexity of collective exploration in knowledge domains, where the interplay between individual and group dynamics shapes the trajectory of interdisciplinary inquiry and the potential for innovation.

The efficiency of **Social Learning in Expertise Acquisition** is scrutinized, presenting social learning as a potent mechanism for the development of new knowledge. This segment suggests that social learning, bolstered by interactional expertise, offers an efficient pathway to expand one's knowledge horizon. However, it also cautions against the potential pitfalls of such an approach, particularly the risk of overestimating one's expertise acquired through social mechanisms. The discussion advocates for epistemic humility as a protective measure, ensuring a balanced and accurate self-assessment of one's knowledge and capabilities.

In addressing **Communication Strategies in Science Communication (SciComm)**, the narrative explores the contexts in which interactional expertise suffices and where contributory expertise becomes indispensable. This investigation highlights the complexities of conveying scientific knowledge to non-specialist audiences, stressing the need for a nuanced understanding of the audience's perspective and the challenges inherent in translating complex scientific concepts into accessible language.

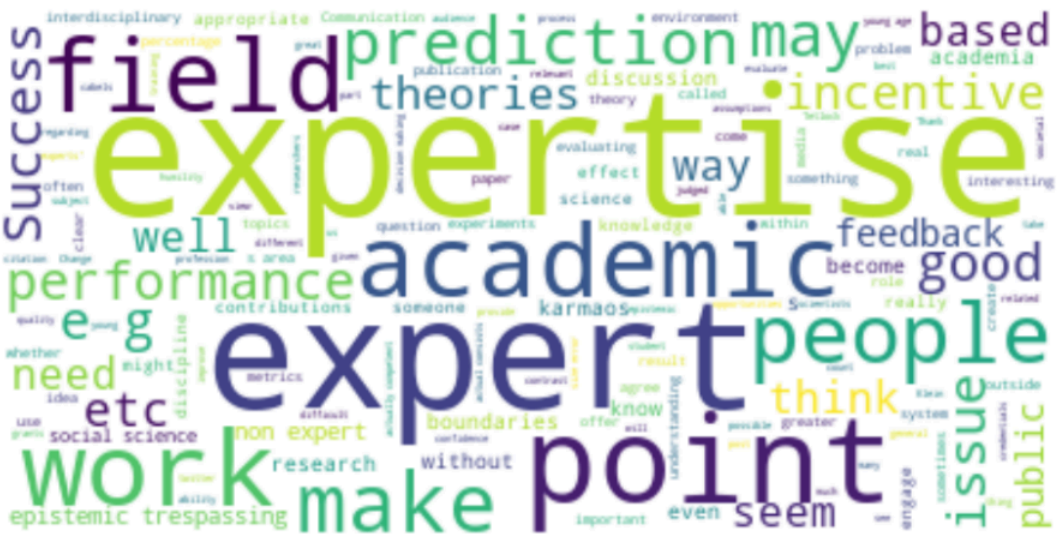
The **Moral Dimensions of Scientific Communication** consider how digital platforms and the broader communication environment can impact the ethical behavior of scientists. This reflection points to the potential of such platforms to challenge professional conduct, emphasizing the importance of ethical considerations in the dissemination of scientific knowledge. It suggests that scientists must navigate these environments with caution, maintaining a commitment to integrity and professionalism in all forms of public engagement.

The **Strategic Deployment of Humility** in scientific communication emerges as a theme, advocating for a nuanced approach to interactions, particularly in contentious or bad-faith dialogues. This strategic deployment seeks to balance humility with confidence, ensuring that expertise is conveyed accurately and effectively, nurturing understanding and trust among diverse audiences.

In the pursuit of **Consensus Communication via Collective Intelligence**, the discussion turns to how collective intelligence can facilitate the identification and communication of expert consensus on complex issues. This approach underscores the value of collective wisdom in achieving clarity and consensus, leveraging the diverse expertise within the scientific community to navigate contentious topics with precision and care.

Lastly, the dialogue on **Terminology in Discussing Expertise and Trespassing** proposes alternative terms such as "venturing" or "exploring" to describe the act of navigating knowledge across disciplinary boundaries. These terms aim to capture the spirit of interdisciplinary exploration without the negative connotations associated with "trespassing," enabling a more positive and constructive discourse on the complexities of interdisciplinary knowledge exchange.

## 3. Reenvisioning Expertise in the Age of Interdisciplinary Collaboration




The discourse on **epistemic trespassing** transcends traditional boundaries between experts and non-experts, suggesting a paradigm where insights from both groups are not only valued but essential for comprehensive knowledge creation and decision-making. This shift reflects a growing recognition of the **utility of non-expert contributions**, emphasizing the importance of incorporating diverse perspectives into the fabric of scientific inquiry and policy formulation. Such integration challenges the conventional hierarchy of knowledge, proposing a more egalitarian approach to understanding complex phenomena.

The **impact of social media** has significantly altered the landscape of knowledge exchange, eroding the rigid divisions that once separated experts from the lay public. This digital democratization fosters greater epistemic trespassing, yet it also presents opportunities for a more inclusive dissemination and construction of knowledge. Despite the potential for misinformation, social media platforms enable a wider audience to engage with scientific discourse, highlighting the need for experts to navigate these spaces with **epistemic humility**—an awareness of the limits of their own knowledge and a respect for the contributions of others.

Amid these discussions, points of contention emerge, particularly regarding **institutional and disciplinary boundaries**. Questions arise about the necessity for institutional reform to facilitate broader participation and whether current academic structures hinder the development of interdisciplinary expertise. Such barriers often perpetuate a siloed approach to research and education, limiting the potential for cross-disciplinary collaboration and innovation.

The evaluation of expertise itself is under scrutiny, with a consensus leaning towards **performance-based metrics** over traditional academic credentials. This approach prioritizes observable outcomes of expertise, such as accuracy (predictive and post hoc) problem-solving effectiveness, logical and statistical corrections (and errors), and even the degree to which one communicates scientifically (by restricting one's public statements, advice, or predictions to those that can be evaluated, tested, or resolved using observable

evidence). However, the abstract and often non-predictive nature of some theories in the **social sciences** may limit the application of some metrics, raising questions about whether social science theory is in a position to offer expertise or whether outcomes matter more when it comes to actionable information from so-called experts .

Criticism is also directed at the academic incentive system, which is seen as inadequately promoting interdisciplinary work and public engagement. The focus on specialization and publication metrics over societal contributions and critical thinking is highlighted as a key flaw in the current academic paradigm. This critique calls for a systemic overhaul to encourage scholars to broaden their horizons and engage more directly with societal needs and ethical considerations.

**Contextualizing expertise** to connect specialized knowledge with broader societal impacts emerges as a crucial theme. This requires experts to transcend technical proficiency and engage with the moral and ethical dimensions of their work, ensuring that their contributions are relevant and responsive to the needs of society at large.

Advocating for a redefined conception of expertise—one that values interdisciplinary engagement, embraces the insights of non-experts, and is measured by the ability to address real-world challenges. It calls for systemic changes within academia and a cultural shift towards recognizing the importance of diverse knowledge contributions. By promoting an environment that encourages cross-disciplinary collaboration and values the societal context and impact of research, the scientific community can better navigate the complexities of the modern world.

## 4. Enhancing Interdisciplinary Engagement: Insights from Active Discourse on Expertise Dynamics

In our exploration of the integration of diverse knowledge bases and the enhancement of communication across disciplinary divides, a comprehensive approach was outlined,

encompassing the leveraging of knowledge brokers, harnessing collective intelligence for consensus-building, and adopting audience and context-tailored communication strategies. This approach necessitates platforms and practices that support an effective and ethical exchange of ideas, underpinning the broader discourse on redefining expertise and promoting interdisciplinary engagement.

**Councils of Trust** emerged as pivotal in facilitating knowledge communication, particularly in high uncertainty situations like the COVID-19 pandemic. These councils, by drawing on diverse expertise, exemplify proactive models for bridging expertise gaps to enhance public trust and understanding. Their efficacy underscores the vital role of structured, trustworthy collaborations in navigating crises and complex issues, signaling a move towards collective intelligence and informed public discourse.

The discussion around **vetting experts** to gauge trust levels among professionals outside one's own domain brought to light the varied methods individuals employ to assess expertise. This deliberation underscores the necessity for transparency, reputation, and easy access to comprehensive data on experts' track records. Such transparency is critical in critical contexts like healthcare and legal advice, where making informed decisions about whom to trust is paramount.

**Meta-forgetfulness** and the dynamic nature of knowledge accumulation highlighted the need for ongoing professional development and lifelong learning. The conversation on the deterioration of expertise—not just through forgetting but also due to rapid advancements in one's field—emphasizes the importance of adapting to the ever-evolving landscape of knowledge and the continuous effort required to maintain expertise.

**Constructive vs. Harmful Epistemic Trespassing** illuminated the nuanced balance between encouraging innovative, interdisciplinary research and preventing misinformation spread. This differentiation underlines the role of digital platforms in amplifying both opportunities and challenges for democratic knowledge exchange, pointing towards the necessity for vigilant moderation and discernment in the digital age.

Lastly, the **critiques of current academic and institutional incentive structures** spurred a dialogue on systemic reform to encourage research that is socially relevant as well as academically rigorous. This call for systemic change advocates for an academic ecosystem that values societal relevance and impact alongside traditional scholarly achievements.

Our discussion reflected a collective aspiration towards a more integrated and inclusive approach to leveraging expertise across diverse fields. By examining the roles of councils of trust, the processes for vetting expertise, the dynamic nature of knowledge, and the distinctions between constructive and harmful epistemic trespassing, we gain a deeper understanding of how to effectively navigate expertise in today's interconnected and complex world. The path towards fostering effective interdisciplinary collaboration and communication underscores the evolving nature of knowledge exchange, highlighting the need for ongoing dialogue, innovation, and adaptability to address contemporary societal challenges comprehensively.

## 5. Towards a Harmonized Framework of Interdisciplinary Engagement and Epistemic Responsibility

Our deliberation advanced through the areas of interdisciplinary engagement, expertise dynamics, and the nuances of epistemic trespassing identifying the collaborative and communicative intricacies required to address complex modern challenges. The idea of the possibility of developing a harmonized framework emerges from this exploration, emphasizing the necessity of clear decision boundaries, effective knowledge integration, and the mindful navigation of interdisciplinary spaces.

Central to this discourse is the significance of **scoping questions** in delineating decision boundaries, ensuring that conversations remain focused and productive. This clarity facilitates the **effective integration** of diverse expertise through the formation of specialized groups or subcommittees, each tasked with addressing specific, nuanced questions. Such a structured approach not only harnesses unique skills but also underscores the importance of **interdisciplinary expertise** and personality considerations in crafting solutions that are both innovative and applicable.

As we navigate the delicate terrain of **epistemic trespassing**, awareness of its varied forms—positive, negative, and neutral—becomes paramount. This awareness, coupled with an understanding of the specific types of questions at hand, guides us in developing a collaborative ethos necessary for effective structuring and decision-making. The **argumentative theory of reasoning** further enriches this landscape, advocating for a problem-solving approach rooted in collective intelligence rather than individual dominance.

Amidst these discussions, the acknowledgment of **power dynamics** and privilege within scientific systems prompts a critical reflection on how these elements influence dialogues and decision outcomes. The discourse around **epistemic responsibility** and the potential for epistemic trespassing to serve as a legitimate response to injustice introduces a nuanced

layer to our understanding of interdisciplinary engagement, especially in politically charged contexts.

The concept of **communicating expertise** emerges as a crucial skill set, highlighting that the articulation of knowledge is as important as its possession. This realization underscores the complexity of science communication, where bringing in diverse voices enriches the conversation but also requires careful consideration of the structures and dynamics in place to prevent potential discord.

In moving forward, the collective insights pointed towards a reimagined discourse centered around **epistemic rights** and **epistemic responsibility**, rather than framing the conversation solely in terms of trespassing. This shift not only broadens our perspective on knowledge exchange but also emphasizes the ethical dimensions of engaging across disciplinary boundaries. The recognition that **knowing someone who knows** is often more critical than knowing everything oneself advocates for a more flexible, inclusive approach to leveraging expertise within nested, overlapping, and diverging domains.

## 6. Next Steps: Fostering a Culture of Interdisciplinary Collaboration and Ethical Engagement

As we conclude this exploration, the path forward calls for a continued commitment to fostering a culture of interdisciplinary collaboration, underpinned by principles of epistemic responsibility and mutual respect. The development of frameworks and practices that support effective communication, acknowledge diverse expertise, and navigate the complexities of power dynamics within scientific and societal systems will be crucial. By prioritizing ethical engagement and valuing the contributions of both experts and non-experts alike, we can collectively advance our understanding of the world's most pressing challenges and work towards innovative, inclusive solutions.

Our next steps involve not only refining the theoretical underpinnings of these concepts but also implementing practical strategies that embody this harmonized framework. Engaging in open dialogues, creating platforms for interdisciplinary exchange, and developing educational programs that emphasize the importance of epistemic humility and responsibility are essential in actualizing this vision. As we venture into this uncharted territory, our shared commitment to expanding the boundaries of knowledge and promoting an inclusive, respectful scientific community will guide us towards a future rich in discovery and collaboration.